

Asset Class Glossary: Fixed Income  
Policy: Dollar-Denominated Fixed Income Program - Internally Managed  
September 16, 2005

**Arbitrage**

The simultaneous purchase and sale of two instruments for the purpose of capturing a pricing disparity between them. The instruments do not need correlated price movements.

**Asset-Backed Security**

A security collateralized by assets such as automobile loans, agricultural equipment loans, and credit card loans. The loans are securitized by the issuer and usually placed with a trustee.

**Asset-Based Loans**

Secured debt that is loaned to primarily non-investment grade borrowers for mostly working capital, acquisitions, turnarounds, growth financing, debtor-in-possession financing (DIP Financing), exit financing, and corporate recapitalization/reorganizations.

**Bond**

A unit of debt, \$1,000 of principal or par amount. For 200 years municipal bonds were sold in \$1,000 denominations. Since the mid-1970s the minimum bond denomination has been \$5,000; nevertheless, "A Bond" is bought, sold, referred to, and priced as if it were \$1,000.

**Break-Even Analysis**

Uses results from the scenario analysis. Since all projections should be viewed as risky, evaluating the sensitivity of the projected return to adverse market movements is critical. The break-even analysis calculates the movement required to reduce the sector or portfolio returns to a specified level at some horizon. This analysis creates a form of risk/return ratio. The higher the break-even value, the more the cushion against an adverse movement in rates.

**Call Risk Analysis**

Examines the portfolio's callable securities and estimates the amount of principal returned for a given drop in interest rates.

**Caps**

Designed to provide insurance against the rate of interest on a floating rate loan rising above a certain level (known as the cap rate).

**Chief Investment Officer**

Heads the CalPERS Investment Office and works with the Investment Committee to develop a long-term investment policy and asset allocation strategy for the Public Employees' Retirement Fund.

**Collateralized Mortgage Obligation**

A mortgage-backed security that pools together mortgages and separates the cash flows into short, medium, and long classes (often called tranches), allowing a wider range of risk and return characteristics than in the more homogeneous pass-through market.

**Convertible Bond**

A bond that has a provision that permits conversion to the issuer's stock at some fixed ratio.

**Convexity**

The price change from a move in interest rate that cannot be explained by duration only. Positive convexity (when price rises more than expected and falls less) comes at a cost (lower yield). Negative convexity (price rises less than expected and falls more) usually comes with higher yield.

**Corporate**

Securities issued in the U.S. market by U.S. corporations or foreign corporations (Yankee bonds).

**Corporate Sector**

As defined by the System's corporate investment managers in BlackRock Solutions, Aladdin product. Examples of sectors include banking, independent finance, diversified telecom, etc.

**Credit Mortgages**

Defined as loans or securities that are generally backed by lease structures. The primary underwriting analysis and source of repayment are clearly based on the credit-paying ability of the tenant or the borrower directly as opposed to the income-producing ability of the real estate itself.

**Credit Rating**

A current opinion of an obligor's overall financial capacity (its creditworthiness) to pay its financial obligations. This opinion focuses on the obligor's capacity and willingness to meet its financial commitments as they come due. In the case of split ratings, the higher rating of either Moody's, Standard & Poor's, or Fitch Investor Services shall apply.

**Custodian**

A bank or other financial institution that provides custody of stock certificates and other assets of an institutional investor.

**Derivative**

An instrument whose value is based on the performance of an underlying financial asset, index, or other investment. Classes of derivatives include futures contracts, options, currency forward contracts, swaps, and options on futures.

**Dismissal**

Termination of the investment management contract with CalPERS.

**Duration**

A measure of price sensitivity to interest rate changes. Duration is the anticipated percentage move in price given a 100 basis point (1 percent) move in interest rates.

**Economic Analysis**

Examines reference points for indications on what to look for and what events are considered significant in the economy to understand relationships among complex and often seemingly unrelated events. This analysis is used in making decisions concerning duration and sector weightings.

**Eurodollar Bonds**

U.S. dollar denominated securities issued in Europe.

**Event Risk**

The risk that the credit quality of a bond will drop suddenly because of some event like a takeover.

**External Manager**

An outside money management firm retained under contract by CalPERS.

**Financial Futures**

A contract to trade a financial investment, like a Treasury bond, at a specific price and future date. As interest rates rise or fall, the value of such contract falls or rises respectively.

**Fitch Ratings**

A nationally-recognized credit rating agency that grades the investment quality of bonds in a 10-symbol system. The ranges extend from the highest investment quality, which is AAA, to the lowest credit rating, which is D. Securities rated BBB- or greater are considered investment-grade. Securities rated BB+ or below are considered to be speculative.

**Floors**

Provide insurance against rate of interest on a floating rate loan dropping below a certain level.

**Futures**

Contracts to buy or sell a standard quantity of a given instrument, at an agreed price, on a given date. A future differs from an option in that both parties are obliged to abide by the transaction. Futures are traded on a range of underlying instruments including commodities, bonds, currencies, and stock indices.

**General Pension Fund Consultant**

An individual or organization that provides specialized professional assistance to the CalPERS Board of Administration in determining the pension fund's asset allocation model or optimal combination of investments in order to maximize risk-adjusted investment returns in a manner consistent with the State's long-term pension liabilities.

**Government Sponsored Securities**

Issuer that benefits from sponsorship with or underlying guarantee from a single or multiple sovereign or regional government entity.

**Hedge (Hedging)**

A strategy used to offset investment risk. A perfect hedge is one eliminating the possibility of future gain or loss.

**High Quality LIBOR**

A short-duration, highly liquid, LIBOR-based fund managed by CalPERS staff.

**High Yield**

Securities that are rated at or below Ba1 by Moody's, BB+ by Standard & Poor's, and BB+ by Fitch Ratings. These securities are also known as non-investment grade, speculative, or "junk" bonds.

**Historical Factors**

A review of past relationships and the environment associated with them to assess the relative investment potential of the current market conditions and relationships.

**Idiosyncratic Risk**

Risk particular to an individual or group of issuers.

**Inverse Floaters**

A derivative instrument with a coupon rate, which cannot go below zero, that moves inversely with an index rate like London Interbank Offer Rate or 11th District Cost of Funds Index, usually with a leverage factor. The higher the leverage factor, the greater the price sensitivity.

**Investment Grade**

A minimum credit rating of at least Baa3 by Moody's Investor Service or BBB- ~~for~~ by Standard & Poor's Corporation, and or BBB- by Fitch. Investment grade ratings apply to issuers whose financial risk is relatively low and the probability of future payment relatively high.

**Issuer**

A state or local unit of government that borrows money through the sale of bonds and/or notes.

**Lehman Brothers Long Liability**

A custom index developed by Lehman Brothers composed of dollar-denominated securities issued in the United States with a focus on longer maturity securities that have an issue size of at least \$200 million. The index has fixed weights of 30 percent mortgages, 24 percent investment grade corporates, 3 percent Yankee Sovereigns, 40 percent U.S. governments, and 3 percent high yield. The index is considered appropriate for the System, due to the long nature of the System's liabilities.

**Leverage**

A condition where a portfolio's market obligation may exceed the market-value-adjusted capital commitment by the amount of borrowed capital (debt).

**Leveraged Bank Loans**

Loans made by banks that are typically partially secured by assets and are made to non-investment grade companies with a debt/EBITDA ratio greater than 3.5 and have a spread to LIBOR of greater than 250 basis points.

**LIBOR**

An acronym for London Interbank Offer Rate. These rates are based on rates quoted by 16 (for U.S. dollars) British Bankers' Association designated banks as being in their view, the offered rate at which deposits are being quoted to prime banks in the London Interbank Market at 11:00 a.m. London time. Of the 16 contributors, the four highest and four lowest rates are eliminated. An average of the remaining eight is taken.

**Moody's Investors Service**

A nationally-recognized credit rating agency that grades the investment quality of bonds ~~in a 9-symbol system~~. The ranges extend from the highest investment quality, which is Aaa, to the lowest credit rating, which is C. Securities rated Baa3 or greater are considered investment grade. Securities rated Ba1 or below are considered to be speculative.

**Mortgage Backed Security (MBS)**

A general term used to describe securities backed by mortgages. MBSs are broken down into four types of securities: mortgage pass-through, mortgage-backed bond, collateralized mortgage obligation (CMO), and stripped mortgage-backed bonds. Mortgage pass-throughs are pooled loans, typically issued by the Government National Mortgage Association, Federal National Mortgage Association, and Federal Home Loan Mortgage Corporation. Mortgage-backed bonds have mortgage loans as collateral, but the term and interest payments are fixed. CMOs are defined above. Stripped mortgage-backed securities have the principal and interest distribution altered from a pro rata distribution to an unequal distribution.

**Municipal Bond**

Bonds issued by any of the 50 states, the territories and their subdivisions, counties, cities, towns, villages and school districts, agencies (such as authorities and special districts created by the states), and certain federally-sponsored agencies (such as local housing authorities). There are two broad groups of municipals: 1) Public Purpose bonds, which remain tax-exempt and can be issued without limitation; and (2) Private Purpose Bonds, which are taxable unless specifically exempted.

**Option (on a Fixed Income Security)**

The right or privilege to either buy (call option) or sell (put option) a designated

amount of a particular fixed income security or class of securities during a time period ending on the expiration date of the option.

### **Option Adjusted Analysis**

A method that strips out embedded options in securities such as callable bonds and mortgage-backed securities, enabling comparisons with other security types within a consistent framework.

### **Option Premium**

The amount a seller receives in return for the contingent obligation to sell or buy if the option is exercised.

### **Over-the-Counter (OTC)**

The market for securities and traded products that are not listed on the major exchanges. OTC options are options with negotiated premium, strike price, and expiration date.

### **PIK (Payment in Kind)**

Bonds or preferred stock whose interest is paid in the form of additional bonds or preferred stock.

### **Prepayment Analysis**

A method that stress tests Collateralized Mortgage Obligations by varying the prepayment assumptions to understand and anticipate how the structure changes in a constantly fluctuating interest rate environment.

### **Principal Component Analysis**

A method that measures the movements of the yield curve in terms of three main factors: level, slope, and curvature.

### **Ratings**

Various alphabetical and numerical designations used by institutional investors, Wall Street underwriters, and commercial rating companies to give relative indications of bond and note creditworthiness. Standard & Poor's and Fitch use the same system, starting with their highest rating of AAA, AA, A, BBB, BB, B, CCC, CC, C, and D for default. Moody's Investors Services uses Aaa, Aa, A, Baa, Ba, B, Caa, Ca, C, and D. Each of the services use + or - or +1 to indicate half steps in between. The top four grades are considered investment grade ratings.

### **Real Return Relationships**

The historical perspective looking at expected returns, less inflation with the expectation that the real return is mean reverting.

### **Scenario Analysis**

Projects returns over a number of changing situations (such as interest rates, curve twists, spreads, etc.) and weighs each situation to arrive at an average expected return. This process allows comparisons to varying types of securities and portfolios.

**Security**

Instrument that signifies an ownership position in a corporation (stock), a creditor relationship with a corporation or governmental body (bond), or rights to ownership such as those represented by an option, subscription right, and subscription warrant.

**Senior Investment Officer of Fixed Income**

The senior investment officer is responsible for all fixed income and reports to the chief investment officer of CalPERS.

**Short Duration Fund**

A fund managed by CalPERS staff that is designed to earn a return premium versus traditional short duration assets through a modest increase in portfolio duration and by purchasing a broader universe of short duration securities than those typically available to traditional money market portfolios.

**Short Selling**

Selling securities that are not owned and buying them back later to: 1) take advantage of an anticipated decline in the price; or 2) to protect a profit in a long position.

**Sovereign**

A security issued by a foreign government or government sponsored agency.

**Speculation**

Assumption of risk in anticipation of gain but recognizing a higher than average possibility of loss.

**Split Rated Security**

~~A security that has a different credit classification by two rating agencies. For the purpose of this policy, a security is called a split rated security, if Standard & Poor's and Moody's report a difference in the ratings.~~

**Standard & Poor's**

A nationally-recognized credit rating agency that grades the investment quality of bonds in a 10-symbol system. The ranges extend from the highest investment quality, which is AAA, to the lowest credit rating, which is D. Securities rated BBB- or greater are considered investment grade. Securities rated BB+ or below are considered speculative.

**Swap**

Private agreement between two companies to exchange cash flows in the future according to a prearranged formula.

**Unleveraged Bank Loans**

Loans made by banks that are typically partially secured by assets and are made to investment grade companies with a debt/EBITDA ratio less than 3.5 and have a spread to LIBOR of less than 250 basis points.

**Watchlist Status**

Indicates a level of concern, the degree of which shall be unique to each situation and quantified by staff to the Investment Committee.

**Yankee Bonds**

Securities issued in the domestic market by foreign borrowers. Yankee bonds must be issued by companies domiciled in G11 countries, Australia, Ireland, or Scotland, and must be rated at least A3 (Moody's) and A- (Standard & Poor's).

**Yield Curve**

Graph showing the term structure of interest rates by plotting the yields of all bonds of the same quality with maturities ranging from the shortest to the longest available.